

What Is Claimed Is:

- 1 1. A method of distributing revocation state information, the method
2 comprising:
3 receiving first update scheduling information from a first party; and
4 sending digital certificate revocation state information to the first
5 party according to a schedule that is based on the first update scheduling
6 information.
- 1 2. The method of claim 1, wherein the method further comprises:
2 receiving second update scheduling information from a second
3 party; and
4 sending digital certificate revocation state information to the
5 second party according to a schedule that is based on the second
6 update scheduling information.
- 1 3. The method of claim 2, wherein the digital certificate revocation state
2 information is sent to the first party on a different schedule than the
3 digital certificate revocation state information is sent to the second party.
- 1 4. The method of claim 2, wherein the schedule provides that the digital
2 certificate revocation state information is sent to the first party at an
3 interval that is less than every 30 seconds.

- 1 5. The method of claim 2, wherein the schedule provides that the digital
2 certificate revocation state information is sent to the first party at an
3 interval that is less than every 5 seconds.
- 1 6. The method of claim 1, wherein the method further includes receiving
2 new update scheduling information from the first party, and wherein
3 when the new update scheduling information is received the digital
4 certificate revocation state information is sent to the first party according
5 to a schedule that is based on the new update scheduling information.
- 1 7. The method of claim 1, wherein the digital certificate revocation state
2 information sent includes a certificate revocation list.
- 1 8. The method of claim 1, wherein the digital certificate revocation state
2 information includes information identifying revoked certificates.
- 1 9. The method of claim 1, wherein the digital certificate revocation state
2 information sent includes delta-certificate revocation list information.
- 1 10. The method of claim 1, wherein sending digital certificate revocation
2 state information includes sending information using multicasting.

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- 1 11. A method of distributing revocation state information, the method
2 comprising:
3 receiving update scheduling information from a digital certificate
4 verifier;
5 assembling certificate revocation information on an ongoing basis;
6 and
7 capturing a state of the certificate revocation information as a
8 certificate revocation list and transmitting the captured certificate
9 revocation list to the digital certificate verifier on a schedule determined
10 by the received update scheduling information.
- 1 12. The method of claim 11, wherein the captured certificate revocation list is
2 transmitted using multicast broadcasts.
- 1 13. The method of claim 12, wherein the captured certificate revocation list is
2 a delta-certificate revocation list.
- 1 14. The method of claim 11, wherein said update scheduling information is
2 received during a verifier subscription process.

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1 15. The method of claim 14, wherein the method further comprises receiving
2 new update scheduling information from the verifier, and wherein the
3 revocation state information is transmitted according to a schedule that is
4 based on the new update scheduling information.

1 16. A method of verifying the validity of a certificate for a transaction, the
2 method comprising:
3 sending update scheduling information to a certificate authority;
4 and
5 receiving certificate revocation information from the certificate
6 authority at scheduled times based on the update scheduling information
7 at scheduled times.

1 17. The method of claim 16, wherein the method further comprises:
2 receiving a digital certificate from a subscriber; and
3 determining whether the digital certificate was revoked based on
4 the received certificate revocation information.

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1 18. The method of claim 16, wherein said sending update scheduling
2 information includes determining the update scheduling information
3 based on a potential cost of reliance on a revoked certificate.

1 19. The method of claim 15, wherein the method further comprises:
2 receiving a digital certificate from a subscriber;
3 determining whether the transaction is associated with a value
4 that is above a pre-determined threshold level; and
5 verifying the validity of the digital certificate after receiving a next
6 update of certificate revocation information from the certificate authority.

1 20. An article of manufacture comprising a computer-readable medium
2 ,having stored thereon instructions adapted to be executed by a
3 processor, the instructions which, when executed, cause the processor
4 to:
5 receive first update scheduling information from a first party; and
6 send digital certificate revocation state information to the first party
7 according to a schedule that is based on the first update scheduling
8 information.

1 21. The article of manufacture of claim 20, wherein the instructions stored on
2 the computer-readable medium further include instructions adapted to be
3 executed by a processor to:

4 receive second update scheduling information from a second
5 party; and
6 sending digital certificate revocation state information to the
7 second party according to a schedule that is based on the second
8 update scheduling information.

1 22. The article of manufacture of claim 20, wherein the first interval is not
2 equal to the second interval.

1 23. The article of manufacture of claim 20, wherein the instructions stored on
2 the computer-readable medium further include instructions adapted to
3 be executed by a processor to receive new update scheduling
4 information from the first party, and wherein the digital certificate
5 revocation state information is sent to the first party according to a
6 schedule that is based on the new update scheduling information.

1 24. The article of manufacture of claim 20, wherein the digital certificate
2 revocation state information sent includes delta-certificate revocation list
3 information.

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